AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the Application.

LISTING OF CLAIM

- 1-12. (cancelled).
- 13. (currently amended) A compound according to Formula III,

$$\begin{array}{c|c}
R^{5a} & & \\
N & & \\$$

or a pharmaceutically acceptable salt thereof, wherein:

- R^{1a} is selected from halogen, lower perfluoroalkyl, -NO₂, and optionally substituted C₁-4alkyl; and R^{1b} is selected from halogen, -N(R^5) R^5 , -SR⁵, perfluoroalkyl, and optionally substituted lower alkyl;
- R^3 is independently selected from -H, halogen, trihalomethyl, -CN, -NO₂, -OR⁵, -N(R⁵)OR⁵, -ON(R⁵)R⁵, -N(R⁵)N(R⁵)R⁵, -N(R⁵)R⁵, -S(O)₀₋₂R⁵, -SO₂N(R⁵)R⁵, -CO₂R⁵, -C(O)N(R⁵)R⁵, -N(R⁵)SO₂R⁵, -N(R⁵)C(O)R⁵, -N(R⁵)CO₂R⁵, -C(O)R⁵, -C(=NR⁷)N(R⁵)R⁵, -C(=NR⁷)OR⁵, -N(R⁵)C(=NR⁷)N(R⁵)R⁵, optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, and optionally substituted arylalkyl;

R^{5a} is H;

- each R⁵ is independently selected from -H, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted lower arylalkyl, optionally substituted heterocyclyl, and optionally substituted lower heterocyclylalkyl; or
- two of R⁵, together with the atom or respective atoms to which they are attached, can combine to form an optionally substituted three- to seven-membered heterocyclic;
- each R^6 is independently selected from -H, halogen, trihalomethyl, -CN, -NO₂, -NH₂, -OR⁵, -N(R⁵)R⁵, -S(O)₀₋₂R⁵, -SO₂N(R⁵)R⁵, -CO₂R⁵, -C(O)N(R⁵)R⁵, -N(R⁵)SO₂R⁵, -N(R⁵)C(O)R⁵, -N(R⁵)CO₂R⁵, -C(O)R⁵, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted heterocyclylalkyl, and optionally substituted arylalkyl; or
- two of R⁶, together with the atom or atoms to which they are attached, can combine to form one of an optionally substituted three to seven-membered alicylic, and an optionally substituted three to seven-membered heteroalicylic;
- each R^7 is independently selected from -H, -CN, -NO₂, -N(R^5) R^5 , -OR⁵, -S(O)₀₋₂ R^5 , -SO₂N(R^5) R^5 , -CO₂ R^5 , optionally substituted lower alkyl, optionally substituted lower alkynyl; or
- R⁵ and R⁷, together with the atom or atoms to which they are attached, can combine to form a five- to seven-membered optionally substituted heterocyclyl;
- each of X and Y is independently selected from -C(=O)-, $-C(R^6)R^6$ -, -O-, $-N(R^5)$ -, $-C(=NR^7)$ -, and $-S(O)_{0-2}$ -; provided when X is -O- or $-N(R^5)$ -, then Y cannot contain phenyl, napthyl, cyclohexyl, dihydronapthyl tetrahydronapthyl, or a five-to six-membered heteroaryl, each optionally substituted; and

Q is either =N- or =C(H)-.

14. (previously presented) The compound according to claim 13, wherein R^{1a} is selected from -NO₂, halogen, perfluoroalkyl, haloalkyl, and optionally substituted C_{1-2} alkyl.

- 15. (original) The compound according to claim 14, wherein R^3 is selected from optionally substituted -O-C₁₋₄alkyl, -O-C₁₋₄perfluoroalkyl, optionally substituted -N(H)C₁₋₄alkyl, optionally substituted -N(C₁₋₄alkyl)C₁₋₄alkyl, optionally substituted -S(O)₀₋₂-C₁₋₄alkyl, and optionally substituted -S(O)₀₋₂-C₁₋₄perfluoroalkyl.
- 16. (original) The compound according to claim 15, wherein Y is either -N(H)- or $-C(R^6)R^6$ -.
- 17. (original) The compound according to claim 16, wherein X is selected from -O-, -N(R⁵)- and -S-.
- 18. (original) The compound according to claim 17, wherein Y is $-C(R^6)R^6$ -; wherein each R^6 is independently selected from -H, halogen, trihalomethyl, -NH₂, optionally substituted -O-C₁₋₄alkyl, optionally substituted -N(H)C₁₋₄alkyl, optionally substituted -S-C₁₋₄alkyl, optionally substituted lower alkyl, optionally substituted heterocyclyl, and optionally substituted heterocyclylalkyl.
- 19. (original) The compound according to claim 18, wherein Y is $-C(H)R^6$ -; wherein R^6 is independently selected from -H, halogen, trihalomethyl, -NH₂, optionally substituted -O-C₁₋₄alkyl, optionally substituted -N(H)C₁₋₄alkyl, optionally substituted -S-C₁₋₄alkyl, optionally substituted lower alkyl, optionally substituted heterocyclyl, and optionally substituted heterocyclylalkyl.
- 20. (original) The compound according to claim 19, wherein Q is =C(H)-.
- 21-28. (cancelled)
- 29. (previously presented) The compound according to claim 13, wherein R^{1a} is selected from halo, lower perfluoroalkyl, -NO₂, and optionally substituted C₁₋₄alkyl.
- 30-33. (Cancelled)
- 34. (previously presented) A compound selected from Table 3.

Table 3

Entry	Name	Structure
1	2-[(3-cyano-4,6-dimethyl-5- nitropyridin-2-yl)oxy]-N-[3- (trifluoromethyl)phenyl]acetamide	O_2N CN CF_3
5	N ² -[2-amino-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	H_2N N N N N N N N N N
7	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [3-(methyloxy)phenyl]acetamide	H_2N N N N N N N N N N
9	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- (4-chlorophenyl)acetamide	H ₂ N N S N CI
11	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- (3-chlorophenyl)acetamide	H ₂ N N S H CI

Table 3

	Table 3	
Entry	Name	Structure
14	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3-(trifluoromethyl)phenyl]acetamide	H ₂ N N O H F F
16	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- methyl-N-[3- (trifluoromethyl)phenyl]acetamide	H ₂ N N S N CF ₃
17	N ² -[4-amino-6-(methylthio)-1,3,5- triazin-2-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	H_2N N N N N N N N N N
20	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	H_2N N N N N N N N N N
30	2-amino-4-({2-[2,5- bis(methyloxy)phenyl]-2- oxoethyl}thio)-6- (methylthio)pyrimidine-5-carbonitrile	H_2N N S CN O O O
31	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [4-fluoro-3- (trifluoromethyl)phenyl]acetamide	H_2N N S CN H_2N N S CF_3 F

Table 3

Entry	Name	Structure
34	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [4-chloro-3- (trifluoromethyl)phenyl]acetamide	H_2N N S CN H_2N CF_3 CI
35	2-amino-4-(methylthio)-6-({2-oxo-1-[3-(trifluoromethyl)phenyl]pyrrolidin-3-yl}thio)pyrimidine-5-carbonitrile	H_2N N S CN S CF_3
36	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [6-(trifluoromethyl)pyridin-2- yl]acetamide	H_2N N S CN H_2N N S N S N S N S N N S N S N N S N N S N N S N S N S N N S N S N S N S N N S N N S N S N N S N S N N S N N S N N S N N N S N N S N N N S N
37	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [4-(trifluoromethyl)pyridin-2- yl]acetamide	H_2N N S CN N N S N N N N CF_3
41	2-{[2-(acetylamino)-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [3-(trifluoromethyl)phenyl]acetamide	S H S O H S F F
42	(2S)-2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3- (trifluoromethyl)phenyl]propanamide	$-s \longrightarrow N \longrightarrow F \longrightarrow F$ $N \longrightarrow N \longrightarrow N \longrightarrow N$ $H_2N \longrightarrow N \longrightarrow N$

Table 3

Entry	Name	Structure
45	2-{[2-amino-5-formyl-6- (methylamino)pyrimidin-4-yl]thio}- N-[3- (trifluoromethyl)phenyl]acetamide	NH ₂ N N N N N N N N N N N N N N N N N N N
46	2-{[2-amino-5-formyl-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3-(trifluoromethyl)phenyl]acetamide	NH ₂ N N N N N N N N N N N N N N N N N N N
47	2-{[4-amino-6-(methylthio)-1,3,5- triazin-2-yl]oxy}-N-[3- (trifluoromethyl)phenyl]acetamide	H ₂ N N O H F F
54	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [2-(methyloxy)-5- (trifluoromethyl)phenyl]acetamide	H_2N N N N N N N N N N
55	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [2-chloro-5- (trifluoromethyl)phenyl]acetamide	H ₂ N N S N H CI

Table 3

Entry	Name	Structure
58	N ² -[2-amino-5-[(E)- hydrazonomethyl]-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	S NH ₂ N N N F F N NH ₂
59	N ² -[2-amino-5-[(E)- (hydroxyimino)methyl]-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	NH ₂ NH ₂ N N N N N N N N N N N N N N N N N N N
60	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	S CN H O F F
61	2-{[2-amino-5-cyano-6- (methylamino)pyrimidin-4-yl]thio}- N-[3- (trifluoromethyl)phenyl]acetamide	NH N N S H ₂ N N S
62	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [2-amino-5- (trifluoromethyl)phenyl]acetamide	H_2N N N N N N N N N N

Table 3

Entry	Name	Structure
63	2-amino-4-(methylthio)-6-({[6- (trifluoromethyl)-1H-benzimidazol-2- yl]methyl}thio)pyrimidine-5- carbonitrile	H ₂ N S N F F
64	2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]hydrazinecar boxamide	S N N N N N N N N N F F
65	N ² -[5-cyano-2-(methylamino)-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	N H F F
66	2-{[2-amino-5-cyano-6- (dimethylamino)pyrimidin-4-yl]thio}- N-[3- (trifluoromethyl)phenyl]acetamide	H_2N N S H_2N N S H F F
67	(S)-1-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]prolinamide	H ₂ N N N H F F
68	(2R)-2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3- (trifluoromethyl)phenyl]propanamide	-s N

Table 3

Entry	Name	Structure
69	1-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3- (trifluoromethyl)phenyl]cyclopropane carboxamide	-S N
70	(2S)-2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-3- methyl-N-[3- (trifluoromethyl)phenyl]butanamide	H_2N N N N N N N N N N
72	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2- methyl-N-[3- (trifluoromethyl)phenyl]glycinamide	H_2N N N N N N N N N N
73	1-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]amino}- N-[3- (trifluoromethyl)phenyl]cyclopropane carboxamide	$-s$ H_2N H_2N H_2N H_3 H_4 H_5 H_5 H_5 H_5 H_6 H_7 H_8 $H_$
74	N ² -[2-amino-5-cyano-6- (methylsulfinyl)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	S=O N N N N N N N N N N F F

Table 3

Entry	Table Name	Structure
75	N ² -[2-amino-5-cyano-6- (methylsulfonyl)pyrimidin-4-yl]-N- [3-(trifluoromethyl)phenyl]-L- alaninamide	H ₂ N N N N N N N N N N N N N N N N N N N
	aranmarmide	F O F
76	N ² -(5-cyano-2-morpholin-4-ylpyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]glycinamide	S H S H S H S H S H S H S H S H S H S H
78	N ² -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	H_2N N N N N N N N N N
79	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[2- (methyloxy)-5- (trifluoromethyl)phenyl]-L- alaninamide	H_2N N N N N N N N N N
80	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[2- chloro-5-(trifluoromethyl)phenyl]-L- alaninamide	H ₂ N N H CF ₃
83	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-D- alaninamide	H ₂ N N H CF ₃

Table 3

Entry	Name	Structure
84	2-[(2-amino-5-cyano-6-morpholin-4-yl)thio]-N-[3-(trifluoromethyl)phenyl]acetamide	HZ Z S S S S S S S S S S S S S S S S S S
85	(R)-1-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]prolinamide	H ₂ N N N H F F
86	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide	H_2N N N N N N N N N N
87	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2-[2- (dimethylamino)ethyl]-N-[3- (trifluoromethyl)phenyl]glycinamide	H ₂ N N CF ₃
88	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	H_2N N N N N N N N N N

Table 3

Trackway.	Name	Structure
Entry	Name	Structure
89	N ² -(2,6-diamino-5-cyanopyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	H_2N N N N N N N N N N
90	N ² -(2-amino-5-cyanopyrimidin-4-yl)- N-[3-(trifluoromethyl)phenyl]-L- alaninamide	H_2N N N N N N N N N N
91	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2- methyl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	H_2N N N N N N N N N N
93	2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-1,2- dimethyl-N-[3- (trifluoromethyl)phenyl]hydrazinecar boxamide	H_2N N N N N N N N N N
94	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- amino-5-(trifluoromethyl)phenyl]-L- alaninamide	H_2N N N N N N N N N N
95	ethyl [1-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-2-({[3- (trifluoromethyl)phenyl]amino}carbo nyl)hydrazino]acetate	$\begin{array}{c c} S \\ CN \\ H_2N \\ N \\$

Table 3

Entry	Name	Structure
96	2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-2- methyl-N-[3- (trifluoromethyl)phenyl]hydrazinecar boxamide	H_2N N N N N N N N N N
100	$ m N^2$ -[5-cyano-2-(methylthio)pyrimidin-4-yl]- N-[3-(trifluoromethyl)phenyl]glycinamide	S N N CF3
101	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2- (tetrahydro-2H-pyran-4-ylmethyl)-N-[3- (trifluoromethyl)phenyl]glycinamide	H_2N N N N N N N N N N
102	N ² -(2-amino-5-cyano-6-{[2- (dimethylamino)ethyl]oxy}pyrimidin-4-yl)- N-[3-(trifluoromethyl)phenyl]-L- alaninamide	H_2N N N N N N N N N N
103	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-6-{[(1,1- dimethylethyl)oxy]carbonyl}-N-[3- (trifluoromethyl)phenyl]-L-lysinamide	NH ₂ ONH t-Bu ONH CN NH ON NH

Table 3

Entry	Table Name	Structure
104	2-amino-4-(methylthio)-6-(methyl{(1S)-1- [6-(trifluoromethyl)-1H-benzimidazol-2- yl]ethyl}amino)pyrimidine-5-carbonitrile	NC N NH2 NC N N N CF3
105	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2-[2- (tetrahydro-2H-pyran-4-yl)ethyl]-N-[3- (trifluoromethyl)phenyl]glycinamide	S NH ₂ N N O CF ₃
106	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3-{[2- (diethylamino)ethyl]amino}-5- (trifluoromethyl)phenyl]-Ĺ-alaninamide	S NH2 NH NH CN NH CF3
107	2-amino-4-(methylthio)-6-({(1S)-1-[6- (trifluoromethyl)-1H-benzimidazol-2- yl]ethyl}amino)pyrimidine-5-carbonitrile	-s N
108	2-{2-amino-5-cyano-6-[1-(3- trifluoromethyl-phenylcarbamoyl)-1S- ethylamino]-pyrimidin-4-ylamino}-N-(3- trifluoromethyl-phenyl)-2S-propionamide	H_2N N N N N N N N N N

Table 3

	Table 3		
Entry	Name	Structure	
109	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2-methyl-N- (3-methylphenyl)glycinamide	\sim	
110	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2-methyl-N- [3-(1-methylethyl)phenyl]glycinamide	S NH ₂ N N N N N N N N N N N N N N N N N N N	
111	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-5- [imino(nitroamino)methyl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	$\begin{array}{c c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$	
112	methyl 3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-L- alanyl}amino)-5-(trifluoromethyl)benzoate	S NH_2 $NH_$	
113	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3- nitrophenyl)-L-alaninamide	S NH ₂ N N N N N NO ₂ NO ₂	
114	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-lysinamide	S NH2 NH2 CF3	

Table 3

	Table	3
Entry	Name	Structure
115	N ² -[2-amino-5-cyano-6- (propyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alaninamide	NH ₂ NH ₂ NH ₂ CF ₃
117	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-argininamide	NH ₂ NH ₂ NH NH CF ₃
118	N ² -[2-amino-5-cyano-6- (methylsulfinyl)pyrimidin-4-yl]-N-2-methyl- N-[3-(trifluoromethyl)phenyl]-L- alaninamide	NH ₂ N N N N N N N CF ₃
119	N ² -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-2-methyl-N- [3-(trifluoromethyl)phenyl]-L-alaninamide	NH ₂ N N N N CF ₃
120	N ² -[2-amino-5-cyano-6- (propyloxy)pyrimidin-4-yl]-N-2-methyl-N- [3-(trifluoromethyl)phenyl]-L-alaninamide	NH ₂ NH ₂ CF ₃
121	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-2-methyl-N-[3- (trifluoromethyl)phenyl]-L-alaninamide	NH ₂ NH ₂ NH ₂ CF ₃

Table 3

Entry	Name	Structure
122	N ² -{2-amino-5-cyano-6-[(1- methylethyl)oxy]pyrimidin-4-yl}-N-[3- (trifluoromethyl)phenyl]-L-alaninamide	NH ₂ NH ₂ NH ₂ NH ₂ CF ₃
123	N-5-acetyl-N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	S NH2 N H CF3
124	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3- aminophenyl)-L-alaninamide	S NH ₂ N N N N N N N N N N N N N N N N N N N
125	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-L- alanyl}amino)-N-[2-(dimethylamino)ethyl]- 5-(trifluoromethyl)benzamide	S NH2 NH NH NH O CF3
126	2-(methyloxy)ethyl ((4S)-4-{[2-amino-5- cyano-6-(methylthio)pyrimidin-4- yl]amino}-5-oxo-5-{[3- (trifluoromethyl)phenyl]amino}pentyl)carb amate	NH ₂

Table 3

Entry	Name	Structure
127	2-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]hydrazinecarboxa mide	NH ₂ N N H H H CF ₃ CF ₃
128	1,1-dimethylethyl ((4S)-4-{[2-amino-5- cyano-6-(ethyloxy)pyrimidin-4-yl]amino}- 5-oxo-5-{[3- (trifluoromethyl)phenyl]amino}pentyl)carb amate	NH ₂ CF ₃
130	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-methyl-L- alanyl}amino)-N-[2- (dimethylamino)ethyl]-5- (trifluoromethyl)benzamide	S.CH ₃ Chiral N CH ₃ H CH ₃ O CF ₃ HN O
		H₃C ^{·N·} CH₃
131	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-methyl-L- alanyl}amino)-N-[3-(4-methylpiperazin-1-	Chiral Chiral N CH ₃ H CF ₃ CH ₃ O CF ₃ CH ₃
	yl)propyl]-5-(trifluoromethyl)benzamide	H ₃ C ^N

Table 3

Entry	Name	Structure
132	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~2~-methyl- N-{3-[(trifluoromethyl)oxy]phenyl}-L- alaninamide	S.CH ₃ N CH ₃ H OF CH ₃ O
133	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3- bromophenyl)-N~2~-methyl-L- alaninamide	H ₃ C. S CNCH ₃ H H ₂ N N N N N N Br CH ₃ O
134	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-{2-{[2- (dimethylamino)ethyl]oxy}-5- [(trifluoromethyl)oxy]phenyl}-N~2~- methyl-L-alaninamide	S.CH ₃ N CH ₃ H CH ₃ O CH ₃ O CH ₃ O CH ₃ C-N-CH ₃
135	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-methyl-L- alanyl}amino)-N-(2-morpholin-4-ylethyl)- 5-(trifluoromethyl)benzamide	CH ₃ Chiral N CH ₃ H CF ₃ CH ₃ O CF ₃ HN O

Table 3

Entry	Table Name	Structure
136	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N~2~-methyl-N- [3-(trifluoromethyl)phenyl]-L-lysinamide	CH ₃ NH ₂ Chiral N H ₂ N CH ₃ O
137	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3-{[2- (dimethylamino)ethyl]oxy}-5- (trifluoromethyl)phenyl]-L-alaninamide	S.CH ₃ N CH ₃ N F F F O N CH ₃ CH ₃ CH ₃ CH ₃
138	(2S)-2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]amino}-3-oxo- 3-{[3-(trifluoromethyl)phenyl]amino}propyl acetate	H ₃ C·S O CH ₃ Chiral H ₂ N N N CF ₃
139	N^2 -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N \sim 1 \sim -[3- (trifluoromethyl)phenyl]-L-glutamamide	H ₃ C·S H ₂ N O Chiral H ₂ N N H N CF ₃
140	2-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]hydrazinecarboxa mide	H ₃ C O N H H F F F F F F F F F F F F F F F F F

Table 3

Entry	Name	Structure
141	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-L- alanyl}amino)-N-hydroxy-5- (trifluoromethyl)benzamide	S.CH ₃ N CH ₃ H CF ₃ HN O OH
142	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-3- (dimethylamino)-N-[3- (trifluoromethyl)phenyl]-L-alaninamide	H ₃ C S Chiral Chiral Chiral H ₂ N N CH ₃ F F F
143	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-5-morpholin-4- yl-N-[3-(trifluoromethyl)phenyl]-L- norvalinamide	H ₃ C·S N H ₂ N N H O
144	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~5~-[2- (methyloxy)ethyl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	S.CH, NH H ₂ N N N CF ₃

Table 3

Entry	Name	Structure
145	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-L- alanyl}amino)-5-(trifluoromethyl)benzoic acid	Chiral P ₂ N N N CF ₃ HOOO
146	methyl N~2~-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha- glutaminate	H ₃ C·SH ₃ C·OOO Chiral H ₂ N N N H O CF ₃
147	N ⁵ -(aminocarbonyl)-N~2~-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	SMe NH FF F
148	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	CH ₃ NH ₂ NH ₂ NH ₂ N H F F
149	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha-glutamine	H ₃ C. S HO O Chiral H ₂ N N H N CF ₃

Table 3

Entry	Name	Structure
	N ² -[2-amino-5-cyano-6-	CH ₃ Chiral
150	(ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-serinamide	H ₂ N N N CF ₃
	N²-[2-amino-5-cyano-6-	CH ₃ Chiral
151	(ethyloxy)pyrimidin-4-yl]-O- (phenylmethyl)-N-[3- (trifluoromethyl)phenyl]-L-serinamide	H_2N N N N N N N N N N
152	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-argininamide	CH ₃ H ₂ N NH Chiral NH NH NH Chiral
		Chiral
153	$ m N^2$ -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~2~-methyl- $ m N^6$ -{[(phenylmethyl)oxy]carbonyl}-N-[3- (trifluoromethyl)phenyl]-L-lysinamide	H ₃ C. _S N H F _F
		H ₂ N N N N F

Table 3

Entry	Name	Structure
154	N-α-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-tyrosinamide	H ₃ C O CN H Chiral H ₂ N N N CF ₃
155	N ⁵ -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	H ₃ C.S N H ₂ N N N N N N N N N N N N N N N N N N N
156	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N~6~,N~6~- dimethyl-N-[3-(trifluoromethyl)phenyl]-L- lysinamide	CH ₃ H ₃ C. _N ·CH ₃ Chiral
		CH ₃ Chiral
157	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3-[(4- methylpiperazin-1-yl)carbonyl]-5- (trifluoromethyl)phenyl]-L-alaninamide	H ₂ N N N CF ₃ H O N O

Table 3

Entry	Name	Structure
		CH ₃ Chiral
		N CH ₃ H CF ₃
158	3-({N-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)- N-(3-pyrrolidin-1-ylpropyl)-5- (trifluoromethyl)benzamide	H ₂ N N N N N N N N N N N N N N N N N N N
		CN S
		CH ₃ Chiral
		N CH ₃ H
159	3-({N-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)- N-(2-morpholin-4-ylethyl)-5- (trifluoromethyl)benzamide	H ₂ N N N N CF ₃
		CH ₃ Chiral
160	3-({N-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)- N-[2-(dimethylamino)ethyl]-5- (trifluoromethyl)benzamide	H ₂ N N N CF ₃ H O CF ₃
		H₃C ^{·N} ·CH₃

Table 3

r	Table	<u> </u>
Entry	Name	Structure
		CH ₃ Chiral
161	3-({N-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)- N-[3-(4-methylpiperazin-1-yl)propyl]-5- (trifluoromethyl)benzamide	H ₂ N N N CF ₃
		H ₃ C·N
		Chiral
162	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N~2~-methyl- N ⁶ -{[(phenylmethyl)oxy]carbonyl}-N-[3- (trifluoromethyl)phenyl]-L-lysinamide	CH ₃ HN O ON H ₂ N N N N F F F
163	1,1-dimethylethyl ((4S)-4-{[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]amino}-5-oxo-5-{[3-(trifluoromethyl)phenyl]amino}pentyl)carb amate	H ₃ C CH ₃ Chiral H ₃ C CH ₃ O O O NH F F F F F F F

Table 3

Entry	Name (Structure
164	(2S)-2-{[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]amino}-3-oxo-3- {[3-(trifluoromethyl)phenyl]amino}propyl acetate	CH ₃ O CN O CH ₃ CH ₃ CH ₃ CH ₃ CH ₃ CF ₃
165	phenylmethyl N~2~-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha- glutaminate	CH ₃ O O CN H N CF ₃
166	N ² , N ⁵ -diacetyl-N~2~-[2-(acetylamino)-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	O CH ₃ Chiral O CH ₃ Chiral O CH ₃ Chiral O CH ₃ CF ₃
167	2-(methyloxy)ethyl ((4S)-4-{[2-amino-5- cyano-6-(methylthio)pyrimidin-4- yl]amino}-5-oxo-5-{[3- (trifluoromethyl)phenyl]amino}pentyl)carb amate	S.CH ₃ NH NH NH CF ₃

Table 3

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Entry	Name	Structure
168	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-5-morpholin-4-yl- N-[3-(trifluoromethyl)phenyl]-L- norvalinamide	CH ₃ O N H ₂ N N H O Chiral
169	N-((4S)-4-{[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]amino}-5-oxo-5- {[3-(trifluoromethyl)phenyl]amino}pentyl)- N,N-dimethylmethanaminium	CH ₃ CH ₃ Chiral N. CH ₃ N. CH ₃ H ₂ N N H F F
170	Methyl N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha- glutaminate	CH ₃ OH ₃ C O O H ₂ N N CF ₃ Chiral
171	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~6~,N~6~- dimethyl-N-[3-(trifluoromethyl)phenyl]-L- lysinamide	H ₃ C. _N .CH ₃ Chiral
172	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N~2~-methyl-N- {3-[(trifluoromethyl)oxy]phenyl}-L- alaninamide	CH ₃ Chiral N CH ₃ H CH ₃ H CH ₃ O F F

Table 3

· · · · · · · · · · · · · · · · · · ·	Table 3		
Entry	Name	Structure	
173	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha-glutamine	CH ₃ HOOO CN H ₂ N N HOOF CF ₃	
174	N~2~-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-(3- bromophenyl)-N~2~-methyl-L- alaninamide	CH ₃ Chiral O CN CH ₃ H Br CH ₃ O	
175	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]- N ¹ -[3- (trifluoromethyl)phenyl]-L-glutamamide	CH ₃ Chiral Chiral Chiral Chiral	
176	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-3- (dimethylamino)-N-[3- (trifluoromethyl)phenyl]-L-alaninamide	CH ₃ Chiral O Chiral O CH ₃ F F H O Chiral	
177	2-(2-amino-5-cyano-6- ethoxypyrimidin-4-ylamino)-5- hydrazinyl-5-oxo-N-(3- (trifluoromethyl)phenyl)pentanamide	CH ₃ ONH ₂ Chiral	

Table 3

Entry	Name	Structure
Entry	Name	
178	N ² -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-3- (dimethylamino)-N-[3- (trifluoromethyl)phenyl]-L-alaninamide	H ₃ C. O Chiral N O CH ₃ N O CH ₃ H ₂ N N N O F F
	N²-[2-amino-5-cyano-6-	O.CH ₃ N CH ₃ H F F
179	(methyloxy)pyrimidin-4-yl]-N-[3-{[2- (dimethylamino)ethyl]oxy}-5- (trifluoromethyl)phenyl]-L-alaninamide	H ₂ N N H O F O N, CH ₃
		CH ₃
		CH ₃ Chiral
180	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3-{[2- (dimethylamino)ethyl]oxy}-5- (trifluoromethyl)phenyl]-L-alaninamide	H ₂ N N N N F F F O N CH ₃ CH ₃
181	N ² -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-(3- bromophenyl)- N ² -methyl-L-alaninamide	H ₃ C. O Chiral H ₂ N N N N Br CH ₃ O

Table 3

Entw-	Name 1 able	Structure
Entry	Name	The second secon
182	phenylmethyl N^2 -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutaminate	H ₃ C. S O O O H ₂ N N N N CF ₃
183	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-O- (phenylmethyl)-N-[3- (trifluoromethyl)phenyl]-L-serinamide	H ₃ C. S CN O H CF ₃
184	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~5~,N~5~- bis[2-(methyloxy)ethyl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	S.CH ₃ Chiral NOCH ₃ Chiral NOCH ₃ CH ₃
185	1,1-dimethylethyl ((4S)-4-{[2-amino-5- cyano-6-(methyloxy)pyrimidin-4- yl]amino}-5-oxo-5-{[3- (trifluoromethyl)phenyl]amino}pentyl)carb amate	H ₂ N N N CF ₃

Table 3

Entry	Name	Structure
186	$ m N^5$ -acetyl- $ m N^2$ -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	CH ₃ O CH ₃ Chiral NH NH CF ₃
187	N ⁵ ~-acetyl- N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	O CH ₃ Chiral NH NN NN H ₂ N N N CF ₃
188	N_c^2 -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]- N^2 -methyl-N- {3-[(trifluoromethyl)oxy]phenyl}-L- alaninamide	CH ₃ N CH ₃ H OCF ₃
189	methyl 3-({N-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-L- alanyl}amino)-5-(trifluoromethyl)benzoate	H ₂ N N N CF ₃ O O O CH ₃

Table 3

Entry	Name	Structure
		O CH ₃ Chiral
	3-({N-[2-amino-5-cyano-6-	H ₂ N N N CF ₃
190	(methyloxy)pyrimidin-4-yl]-L- alanyl}amino)-N-[2-(dimethylamino)ethyl]- 5-(trifluoromethyl)benzamide	O NH
		H ₃ C ^{.N.} CH ₃
· · · · · · · · · · · · · · · · · · ·	N ² -[2-amino-5-cyano-6-	H ₃ C.s Chiral
191	(methylthio)pyrimidin-4-yl]-3-morpholin-4- yl-N-[3-(trifluoromethyl)phenyl]-L- alaninamide	H ₂ N N N N F
192	N ² -[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-3-morpholin-4- yl-N-[3-(trifluoromethyl)phenyl]-L- alaninamide	H ₃ C O N N H F F F F F F F F F F F F F F F F F
193	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-3-morpholin-4-yl- N-[3-(trifluoromethyl)phenyl]-L- alaninamide	CH ₃ Chiral H ₂ N N H F F F
194	N^5 -(aminocarbonyl)- N^2 -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	ONH ₂ Chiral ONH NH NH NH NH NH NH FF

Table 3

Entry	Name	Structure
195	N~2~-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-D-lysinamide	SMe N H F F F F F
196	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-D-lysinamide	OEt N H F F F F F
197	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-O-methyl-N-[3- (trifluoromethyl)phenyl]-L-serinamide	CH ₃ CH ₃ CH ₃ CH ₃ CH ₃ CF ₃ H ₂ N N N CF ₃
198	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N~5~- (methylsulfonyl)-N-[3- (trifluoromethyl)phenyl]-L-ornithinamide	CH_3 $O=S=O$ NH H_2N H_3 CF_3 CF_3

- 35. (previously presented) A pharmaceutical composition comprising the compound according to claims 13 and a pharmaceutically acceptable carrier.
- 36. (cancelled).

- 37. (currently amended) A method of modulating *in vivo* activity of a kinase, the method comprising administering to a subject an effective amount of a composition comprising a compound according to claim 13, wherein the kinase is p70S6K.
- 38. (cancelled).
- 39. (currently amended) The method according to claim 38 37, wherein modulating the *in vivo* activity of p70S6K comprises inhibition of p70S6K.
- 40. (previously presented) A method of treating diseases or disorders associated with uncontrolled, abnormal, and/or unwanted cellular activities, the method comprising administering, to a mammal in need thereof, a therapeutically effective amount of a composition comprising a compound according to claim 13.
- 41. (previously presented) A method of screening for modulator of a p70S6 kinase, the method comprising combining either a compound according to claim 13, and at least one candidate agent and determining the effect of the candidate agent on the activity of said kinase.
- 42. (previously presented) A method of inhibiting proliferative activity in a cell, the method comprising administering an effective amount of: the compound according to claim 13.
- 43. (currently amended) A method of inhibiting abnormal metabolic activity in a cell, the method comprising administering an effective amount of: the compound according to any of claim 13.